

SEQ ID NO:1

1 GGCAATGGGT CGAAATTCAT AGAATTTTGT GTGAGGTGCG TAGCGGCTCT  
51 GACAGGGGTG CTGCGCGGAG ATCTCTGGTC TCAGGTAGGG CGACAATGGA  
101 GAGGTGTTAG TTGCCCCCTG TATCGCTCTC TGCGTGGCGC ATTGGGTCAT  
151 CCTGCCCCGA CATATGATAT TCCGCTAGAG GATTACTGAT AGTTTCTGCC  
201 TGTCGGGCTT GTCGGGCTTG TCGGGCTTGT CGGGCTTGTC GGGCCTGTCC  
251 CTCTTGTCCT GCCTGTCTCT ACTTTTTTCAC AATCAAAAAA TGGGCGAAGC  
301 CCTTCTTGTT CTATAGTTCT TATAGTTCAT ACGAAAATTA CACATAATTA  
351 TCAATAGCTT ATTCGCTTAA AAGGGAGTAA TTGGGCCGCA AAAGGGAGTA  
401 ATTGGGCCGC AAAAGGGAGT AATTGGGCCG CAAAAGGGAG TAATTGGGCC  
451 GATATCGGTT GTTTACATGG GGAGGAATCC CCTTAATCAT TTCTCCCCAT  
501 GGGAAAGACA ACACAAGTGG CCGCAGACCG GGCCTTCGAC CAGACAAAAA  
551 CTGTGCTCCC TGCCGAGGTG GCGAGAGGGG TCTATATGCG CAATCCGCCC  
601 CGCCTGCAGG CGCTCAAGCT CATGCATTTA ATGATAGCCA CTGCGGGCGG  
651 CCGCATGGCT GATGATGTGC GCCATGAAAT GCGGCTGGCC GACATTGCGG  
701 CAATCGACGG CATGAAAAAC CATGACCGTG AGAGCCTGAC CCCGCTGTTT  
751 GAGGAGCTAG CCGCTGCGGT GTTGACCCAT GATGACCCTG CAAAGATGAT  
801 CGTGACAGTC GCGGCTTGG TCGATGAGGC GCGAATAGAC TACCGCCAGG  
851 AGGCAAGCGG CGAAC'TCCTA GTGACGTGGA CCTTCCGGAG TACATTCCGT  
901 CGTATGGCGG CGGAGTCGAA CCACTGGGCC ATTCTCGACC GTCAAACGGT  
951 ATTCCATCTC GGTAAGTAAGT ATTCCGTGCT GCTGTTCCAG CACGTCTCTA  
1001 GTCTCGCCAA TCTTGATCGG ATGAGCGCGA AAACCTTTAC GGTCCCCGAG  
1051 TTGCGGGCGC TCCTTGAGT GCCCGAGGGA AAGATGGTTC GTTGAACGA  
1101 CGTTAACAGA TTTGCTCTCA AACCTGCACT GGATGAGATC AACCATTAT  
1151 CGCGTCTGAC ATTGACGGCA AAGCCGACCA AGATTGGCCG TAGCGTGGCA  
1201 AGTGTGACTA TAGGCTGGGA AGTGAAAGAC GACCCAACCG TCGCCAGGCG  
1251 CGAGCTGGCG GGTTCGAAG TCGGTCGAGA TGCTCGTCGC AGAGGGGCGAG  
1301 CGGAAACGAT AGCCCCCTCC TTCCCAGAAG CGGGCGGGAT CACCTACAGT  
1351 CCACGTTGGC TGGAGCTGAA ACGCTCTGCT GGCAGCAACA AGGACAACGA  
1401 TCTGATCGCC TCAGACTTCC GCGTTTCTG TCGGGAGAGA GGCGTGCGTC  
1451 TGGACGCTGC AAACATCGAA AAACGTGTTT TAGATTTCTG CGCAAAGGTA  
1501 GGGAAAGGTTT GAGTTTTGAG GTATTTTACC GCAATAGTGT TAAATGACTT  
1551 TCGTGAAACG ATGTGCAATA TAGCGGTAAG ACTATGAAAT ACACGGCTGG  
1601 ACAGGCTGCA AAAGCAACGG GTGTGGCGAC CGCAACCATC ACTCGGGCGC  
1651 TAAAAAGCGG TAAAAATTCC GGTAAAAAAG ATGAATCTGG GGCATGGGTT  
1701 ATAGATCCTG CAGAATTGCA CAGAGTGTTT CCTCCCATT TCAAAGAAATA  
1751 CACCGAAACA CCTAACACGC AAGTATATGG TAAGCGTGAT GAAACACATG  
1801 AAATGACCTC AGAAATCAGC GCATTAGAGC GTGAAGTTCG GACTTTACGC  
1851 GATGCTTTAT CTGATGCCAG GGAGGATCGC GACAAATGGC GCGACATGGC  
1901 CGAGCGTCTT TCAATTTTCAT CACCGATGAG AGAGGAAGAC CGCCCCCTC  
1951 AAAAACAAAG ATGGTGGAAG ATATTCTGAT CCTGGGCTTC AGGAGCCTTG

FIGURE 1A

2001 CCTTTACTGG CGGAAAAACG CGATATTGAG GCACAGGCCC GCACTTTAGA  
2051 GGCGGAAGCC TATAACGAGT ACCAAAAACAC TAGAAGCCAG ATTGAGGAAA  
2101 ATAGGGAACG TG

**FIGURE 1B**

2001  
2051  
2101

SEQ ID NO:2

1 TGGTGAACGC ATTGGCTTGA TGTTTGAGAA AAGCGAAAAG ACCCGGCCAC  
51 AGTTGTGGGT AGAGCGTCGA TATGTGCAAG ACCTGATGCT TGCTGACATC  
101 GAACTCCGTG TCTACCTCGC ATCGTCGCTG TATCAGCCTG CTGCGGATGG  
151 CGGAAAGCCC GCCTATGGTC GTCACGCAGC CCTTAAGGCG ATGCGCGACT  
201 TGGCCCATGC CGATCTGGTG CGTTTCACCA TCGGCCGGAT TACGCAACTG  
251 GAGATGATCC TAGAGCGGTT AACCGAGACA TCTGGTTAAC GCCATAAAGG  
301 CTGCGGCATG AAAATAGGCG GACAATCTGC GCTTGGCCGC CCCCGTTCTC  
351 AGCCGTGCTT GCTCTCTGCC TGCATGGCAC GACGCAGGAT CGCGTTCATA  
401 CGGGTCTGAT ATCCAGACCC GCCCGCCTTG AGCCATGCCA GCACATCGGC  
451 ATCAAGCCGC GCGGTGATCT GCTGCTTGAT CGGGCGATAG AAGCGCCCAC  
501 GCTCGGCGTC TGCCCATTTGG GCTTCGGTCA GCTCGGGAAC ATCGTTGGTG  
551 TCGATCTGCT CGGGCGGCAG AGCGTCCAGC CGCGCCAATT TCTTGCGGCG  
601 CTCCTCGGTA AGAGCGGGCA GCGTATCGAA GGTGTATTCA ACCATTGGCA  
651 TATCTCTTCC TTTCCTGCGG TGTAGCGCGG CGAGCCGAAA TGATGCGGAT  
701 CGTCTCGACC GGATCGGGGC CAGCCTCGAT GATCAGGTGG GCAACCAGAA  
751 GGACGGCAGC GCCATAGATC TGCCCAACGG TTTGCCAGCG GTATTCCCCG  
801 CCCTCGATCC TATCCTGAAC CGTCAGGTGC AACGGATCGG CGAACACATG  
851 CACAGCATCC TCGAACCGBA TGCCATGCTT CTTTTCGTTC GTTTCCGCTT  
901 TGGCGGGATC CCAGATAAAC CGCATCTTCA TGGCAGAATT ATAACACAC  
951 ATTTGTAGTT ATTCAATGGC AAGTCGCAGG TTCAAATCAC GCCCCAAAC  
1001 CGCAACTGTA TTCGTTCTAC TCACGCGCGC TTTTGAATAG AAGCTTGCAT  
1051 GATAACACCC GCCGCGTCCT CAACAAAATA AGGCAAATCC GCCGCGCTGG  
1101 CGCAATCTGC GCTTTGTCGA TGCAAGGTCT TGTGGTTTCA TACTGCAAGA  
1151 GCATGCAAGG AATTGCCCCG GATGAGCACC ACGACGACAC CCACCAAGCC  
1201 GGCTTGAAC AAGGGCCGCG TTGTGCGGAA AAAGCCGCCG CTGACACCTG  
1251 ACCAGATTGC CCTGATCCGT CTCATCCTGC GCCAGGAACG GGCGTGGCGG  
1301 GATCTGGCTC TGTTCAACGT GGCGATCGAC ACCAGTTTGC GCGGCTCGGA  
1351 CCTCGTGCGC CTGCGCGTCT CGGATGTGGC GACCCAGCT GGTCTGCGTG  
1401 AGATCGTCGA GATCCGCCAG AAGAAGACCG AGGCCCGCAA TGTCCGCCCC  
1451 GTACAGGCCC GCCTGTGCGA GGGGACACGC GAGAGCCTGC GGGTCTATCT  
1501 CGCGGCCTCT GACAAGCCGC TGCACAGCTG GCTGTTCACC GGACAGGGCA  
1551 TCCGCTGGTC CCACACCCAC CTTAGCGAGA GCCAGCTGTG GCGCCTGTTC  
1601 AAGTCTGGC TCGAGAAGGC GCGGCTCGAT CCCAGCCTCT ACGGGCTGCA  
1651 CTCGCTGCGC CGAACCCTCC CCAGCCACAT CTACCGCGAG ACCGGCAATC  
1701 TGCGCGCCGC ACAGCTGCTG CTGGGCCATG CCAGCATCGA GAGCACCAG  
1751 GAGTACATCG GCACCGAGCA AGCCGAGGCC CTCGATATCG CACGGAGGTA  
1801 TCACCTCTAA CCCATGGAGA CCTATCTCGA GAAGCGCATC CCCGCCAAGA  
1851 ACACAGCACG GTTCTACCGC ATGGCGGTCC TGCCGAACCT GTTCGGGGAA  
1901 TGGACGCTGT ATCGAGAATG GGGCCGCATT GGCATCAGCG GCCGCATCCG  
1951 GCTCGATTGG TTTGAGAGTG AACAAGATGC CATCGCTGCG ATGCTCGCCA

FIGURE 2A

2001 TCGAGACCGC CAAGCGTCAG CGCGGGTATT GGCTCGAGCC CATCCAGATT  
 2051 GACATGTTCC CAGGGGCATA ACAGGCCATC AATGTAAGAG TGCAAGCGGA  
 2101 GCAAGCAAAA GCCATTTCAC AGTGAGGTGG CAGATGTTCC TGTTCACAG  
 2151 TGAAAGCGCT GATGCTGTTT CCACGCCACA GACTGATACG ACCAAAGCAA  
 2201 CGGGGTCTGC CGCCACAGAC CGGTTGCGCG GCCACCCGCA GAAACGCAGG  
 2251 TAAATGGCG ATTTCCGCAA AAAAACCGTG CAAATGATGG CAAATCACCA  
 2301 TCCAGTTTCA TCCTGAAACC CGTCGCTCAA CATGAACGAG CAGGCCATCA  
 2351 TCCAAGCCCC AGAAACGCGG TCGGCGGACT ACAGATGAGC GATGTTCTGG  
 2401 CTCATAGGCT GCAAGGCCCT GCAACAGTGA TTTCACCGTG AGATTGCAGG  
 2451 GTCTTTTGGC TCTCCCGCAA GAGCCACCTC AGGGTGAGCG AGCTAGCCGT  
 2501 CTAGGTTCAC AGTGAAATCG CTGAGGAGCG TTGCGGGGCT TATGGTTTGG  
 2551 CTGGTCACGT TGGCCATCGG AATGGAGCAT ACGATGGCTT CTACGCAGTC  
 2601 GAATCCTGAG GCTTCACGTG GGAAAAATAC GCTCCAAAAA AGCCCTGACC  
 2651 AAATCTTGGA AAAATTGCTT GAAAAGTTTG CTTCTAAAAA ACTGGGAACG  
 2701 AGATATGCAC GAGATCCCTT ACGAGTGCTG TAGGAGTAAT GCAGTGGACA  
 2751 AAAACGCCAT TTTTGGCCCC AGTAGGAGTA ATGGAGTGGT TATTTTTTGG  
 2801 GAGATTTTGC TTCAGTAGGA GTAACGCGTT GGTTAAATTT GCTTGATTGG  
 2851 CGGTTCAAAT CGACCACCGA GCTGCCGTTG GTCGTATTCT ATCTGCCCCG  
 2901 CAATTGGGCA CTTGCAGGCC ATCCCCCTGA ACTTCTGGCG ATGACCATTT  
 2951 CGAAGGCAAT GGGTCGAAAT TCATAGAATT TTGTGTGAGG TGCGTAGCGG  
 3001 CTCTGACAGG GGTGCTGCGC GGAGATCTCT GGTCTCAGGT AGGGCGACAA  
 3051 TGGAGAGGTG TTAGTTGCCC CCTGTATCGC TCTCTGCGTG GCGCATTGGG  
 3101 TCATCCTGCC CGGACATATG ATATTCGCT AGAGGATTAC TGATAGTTTC  
 3151 TGCCTGTCGG GCTTGTCGGG CTTGTCGGGC TTGTCGGGCT TGTCGGGCCCT  
 3201 GTCCCTCTTG TCCCGCCTGT CCTCACTTTT TCACAATCAA AAAATGGGCG  
 3251 AAGCCCTTCT TGTTCTATAG TTCTTATAGT TCATACGAAA ATTACACATA  
 3301 ATTATCAATA GCTTATTCGC TTAAAAGGGA GTAATTGGGC CGCAAAAGGG  
 3351 AGTAATTGGG CCGCAAAAGG GAGTAATTGG GCCGCAAAAG GGAGTAATTG  
 3401 GGCCGATATC GGTGTTTAC ATGGGGAGGA ATCCCCTTAA TCATTTCTCC  
 3451 CCATGGGAAA GACAACACAA GTGGCCGAG ACCGGGCCTT CGACCAGACA  
 3501 AAAACTGTGC TCCCTGCCGA GGTGGCGAGA GGGGTCTATA TGCGCAATCC  
 3551 GCCCCGCTG CAGGCGCTCA AGCTCATGCA TTTAATGATA GCCACTGCGG  
 3601 GCGGCCGCAT GGCTGATGAT GTGCGCCATG AAATGCGGCT GGCCGACATT  
 3651 CGCGCAATCG ACGGCATGAA AAACCATGAC CGTGAGAGCC TGACCCCGCT  
 3701 GTTCGAGGAG CTAGCCGCTG CGGTGTTGAC CCATGATGAC CCTGCAAAGA  
 3751 TGATCGTGAC AGTCGGCGGC TTGGTCGATG AGGCGCGAAT AGACTACCGC  
 3801 CAGGAGGCAA GCGGCGAACT CCTAGTGACG TGGACCTTCC GGAGTACATT  
 3851 CCGTCGTATG GCGGCGGAGT CGAACCCTG GGCCATTCTC GACCGTCAAA  
 3901 CGGTATTCCA TCTCGGTAGT AAGTATTCCG TGCTGCTGTT CCAGCACGTC  
 3951 TCTAGTCTCG CCAATCTTGA TCGGATGAGC GCGAAAACCT TTACGGTCCC  
 4001 CGAGTTGCGG GCGCTCCTTG GAGTGCCCGA GGGAAAGATG GTTCGTTGGA  
 4051 ACGACGTAA CAGATTTGCT CTCAAACCTG CACTGGATGA GATCAACCAT

**FIGURE 2B**

4101 TTATCGCGTC TGACATTGAC GGCAAAGCCG ACCAAGATTG GCCGTAGCGT  
 4151 GGCAAGTGTG ACTATAGGCT GGGAAAGTGAA AGACGACCCA ACCGTCGCCA  
 4201 GGCGCGAGCT GGCGGGTTCC AAGGTCGGTC GAGATGCTCG TCGCAGAGGG  
 4251 GCAGCGGAAA CGATAGCCCC CTCCTTCCCA GAAGCGGGCG GGATCACCTA  
 4301 CAGTCCACGT TGGCTGGAGC TGAAACGCTC TGCTGGCAGC AACAAAGGACA  
 4351 ACGATCTGAT CGCCTCAGAC TTCCGGCGTT TCTGTCGGGA GAGAGGCGTG  
 4401 CGTCTGGACG CTGCAAACAT CGAAAACTG TTTTATAGATT TCTGCGCAAA  
 4451 GGTAGGGAAG GTTTGAATTT TGAGGTATTT CACCGCAATA GTGTAAATG  
 4501 ACTTTCGTGA AACGATGTGC AATATAGCGG TAAGACTATG AAATACACGG  
 4551 CTGGACAGGC TGCAAAAGCA ACGGGTGTGG CGACCGCAAC CATCACTCGG  
 4601 GCGCTAAAAA GCGGTAAAAT TTCCGGTAAA AAAGATGAAT CTGGGGCATG  
 4651 GGTTATAGAT CCTGCAGAAT TGCACAGAGT GTTTCCTCCC ATTTCAAAGA  
 4701 AATACACCGA AACACCTAAC ACGCAAGTAT ATGGTAAGCG TGATGAAACA  
 4751 CATGAAATGA CCTCAGAAAT CAGCGCATTG GAGCGTGAAG TTCGGACTTT  
 4801 ACGCGATGCT TTATCTGATG CCAGGGAGGA TCGCGACAAA TGGCGCGACA  
 4851 TGGCCGAGCG TCTTTCAATT TCATCACCGA TGAGAGAGGA AGACCGCCCC  
 4901 CCTCAAAAAC AAAGATGGTG GAAGATATTC TGATCCTGGG CTTCAGGAGC  
 4951 CTTGCCTTTA AAACCTGAAT CAGCATTCTA GCGATGCTGA TAAGAAGTAA  
 5001 ATATAGCCAC AATAGAGCGG CCATTTTCCA TTCACATACA GCTCATCATG  
 5051 TGATCAATAT CAAGTATTGA TATTCATCAA TGGAGAAGAA TTTACATGTA  
 5101 TCACAGGATC ATCACAGCAT TTGTTTTTGT ATTTCTAAGT GCTAACATAA  
 5151 CTATCGCTGG CCTTAAAGAA GATTGTACTA TTGCAGTATC TCACCTTGGG  
 5201 TTTCAGACCG ATAATTACAG CTTTGTGCGA GCCGGTTTTT TTGCCAGAGA  
 5251 GAGACACGTT TTTGATGGTG TAATAAACTG CTACGTATCT CATGATGGTA  
 5301 ACATACACAG CATCATCCGG GGCAACACAC CTCTTATGGA AGATGGATAT  
 5351 TATGGCCCAG AAGTACTGGC GGAAAAACGC GATATTGAGG CACAGGCCCG  
 5401 CACTTTAGAG GCGGAAGCCT ATAACGAGTA CCAAAACACT AGAAGCCAGA  
 5451 TTGAGGAAAA TAGGGAACGT GCCCTCGAGG CGCTGCGGCT AGCTAGCAGT  
 5501 CCTTTTATTA ATAATGGTAG TACAGAAGAA CAGACAATTA TACAGGCCGC  
 5551 AACTCCGACG GCAGATCCTG TTGTATCTGT ACCCGTGGCA TCTCCAGAAT  
 5601 CTAAACAAAG TCGAGAGCCG GAACCGGCTG CTGTTCCAGC ATCAGTTTCT  
 5651 GTTAGAGAGA TGTGGAGCAC GGCTGACAGA TTGACCACCC GTACATGCCC  
 5701 ATCGACTCGA TGCGGAGCAA CTAGCTGGGT AACAGATGGA ACTAAAGTAA  
 5751 CAGTTTATGA AGAAAAAGAC GGTGGTCTA GAATCGGAGA GCTACAGTCT  
 5801 GCAATGTGCA TAAATGGAAT AAGTGGCGCG GTCGATTGAG GTGAATCTTC  
 5851 CTGCAATCCC ACCAATGGTA TCGTTAATGG GCAATTGCGA CCCTGGGTTT  
 5901 TCTCGGATTA TCTTACGATC CAAGAGCCAG AAGCTCCCAT ATCCACCCAA  
 5951 GAGTGTGCGA ATATGGGGCT CGAGAACTCA GATAATTACC GTATCTATTC  
 6001 TAGTCAGTTC TGCACTGCCG CTCTCGAAAT GATCAACGAT AGAGTATGCA  
 6051 ATACATCTGA TTTCAGAGAT TTAGCTTGGT TATCTTCTCC TGAAAGAGGA  
 6101 CAGGATTACT ACTTCACCTA TTGTGGCGGA TTTCAACCTC AAAACAGATG  
 6151 GTATTTGAAT GTCAGGACAG GTGAAATCAC CCGCTGATAT TCCACCAAGG

**FIGURE 2C**

6201 TGAGTCCTGT AGATCAGACT CTCAAGGAGT AAACGTTTTA ATCCATCTCC  
 6251 ATGAGATCAA CATAGATAGG TGTTTCAGTCC CGGCATCTGG TGGATCGGGT  
 6301 TTAGGATGAA TCTGTCCGGC TCTTGACATA CCCCCGCGTG AAACCCTGTC  
 6351 TTTACAAGAG AAAGTCAGCG GCCTCGAAGC CGCTCTAGCC GATGCCCCGG  
 6401 CCCAACGGGA TGAGTAGAGC GAACAAGCAA AGCGCCTAGC TATGGCTCTG  
 6451 CCCGTCCCGG AAGCTGCAGC CGCAGAATCC GGAAAAAAGA AAAAATACAT  
 6501 GGCAGCGATT ATTTGGATAG GACACAATCC TTTTCTATTA ATATACAACA  
 6551 AGATATGGGC ATGCGCCGCG CGTGATCCTC ATTGCATACA ATCCAAATCC  
 6601 TGAAAGCTGA CTATGCCCTA CGCATCGCGC ACCATCGGTG CCGTCATTGA  
 6651 TGACGTGAAC CGCACCTACC TGCTGCCCCG AATCCAACGC CCCTATGTCT  
 6701 GGTCTGCCGG ACAGGTCGTT GCGCTGTTTC ACTCTCTGTT GAAGGGCTAT  
 6751 CCGATCAGCA GCTTCATGTT CTGGGCGGTG GACGAGGAGA CCAAGGCAGA  
 6801 GCTGCGATGC TACAAATTCA TCGAGAATTA TCGGCCCCGAA ATGATGAACG  
 6851 AGCCGACTAG TGCGGACGGG CGGCAGGTCG TCCTTGTGCT CGACGGACAG  
 6901 CAGCGGATGA CCTCACTGTT GATCGGCTTG CGCGGCACAT TCTCTGAGAA  
 6951 AGCCAAACAC GCGCGCAACA GCAACGCGGC GGCCTGGTCG GCAAAAACGC  
 7001 TATATCTAGA CCTGCTTCGG GACCCGGATC CGAAGAATC CGATGAAGAC  
 7051 GAAGGCAATG AGTTCGGAAT CACTTACGGT CTCTCTTTCC ATGAACGCCG  
 7101 CCCGACCAGC AGCCACAGGC ACCACTGGTT CAAGGTGGGA TCGATACTGG  
 7151 ATTATCCTAC AGACGAGCAG CTGGAGGGGT TGATTGCCAA GGTGAAGACC  
 7201 GAATTTTCATC ATGGTGTATC GGATTGGGAA AAGGGGCTGG CGGAAGACAC  
 7251 CCTGCGCCGG TTGCACCGCG TCATCTGGAA AGACGAGGGC ATCAACTTTT  
 7301 TCACTGAACG CGACCAGTCG GTTGATCGGG TGCTGGACAT CTTCGTGCGG  
 7351 GCCAATGACG GGGGCACGAA ACTGTCGAAG GCAGACCTGC TGATGTCGAT  
 7401 GATCACGTCA AAATGGTCCA GCGGATCGGC CCGCGAGGAA ATCGGCGGCT  
 7451 TTGTCGAGCA CATAAACAAA GGTCTCGGTG CGCCGAACAA GATCAGTCGC  
 7501 GATCTGGTCC TGAAGGCCTG TCTGGTCGTC TGCGATTATG ATGTCGTCTA  
 7551 TAATGTCAGG AACTTTACAA GCGAGGTCAT CGGCAGGATC GAAAGCAACT  
 7601 GGGATCGTAT CAAGCAGGCA TTCGAGAACA CGTTCCGCCT GCTGAACAGG  
 7651 CATGGCATCA CCGGGGATAA CCTCGGCTCT TTGAACGCGG TGCTGCCTCT  
 7701 GGTCTATTAT ATCTACAACA CGCCGGATTT CGATTTCCGA GGATCGAGCG  
 7751 AGTTCGAGCG GGTCAATGCC AGCTCCATGC ACCTCTGGTT GGTGAACAGC  
 7801 CTGCTGGTCA GCGCCTTCGT TGGCCATTCG GATCAGACCA TCACCACCGC  
 7851 GCGCAATACG ATCCGCGATC ACCTGCGTGT AGGCCGCGAT TTCCAGTAC  
 7901 GAAAGCTGTT CGATGCCATG GCGAAGGGG GACGGCTATC TCAGGTGGAT  
 7951 GAGCGTACCA TCGAAGAATT GCTGGAAATG CAATATGGCA AGCCCCGGAC  
 8001 CTTCGTTGCG CTGTCGCTGC TCTATCAGGG CATCGACTGG AACGGATCGA  
 8051 CCTGGCATGT CGATCATATC ATTCCCCAAG CGGACGCTCA GAAAAATGTG  
 8101 CTGCGCGGGC GCAATCTGCC CGAGCATCGC ATTCAGGAAA TCTTGGGCGC  
 8151 GGTTAACAGT TTGGGCAACC TGCAACTTTT GCGCGGAGAT GAGAATATCG  
 8201 AGAAAGGTGC GCTGCCATTC AGGTCATGGA TTACCGGACG GCGCGTTGAT  
 8251 TTCTACGAGC AGCATATGAT CCCGGCGCAC CTTGAAGTGT GCGATGTACT

FIGURE 2D

8301 GCATCTGCCC GAGTTCGTGC GCGAACGGGA AAAGGTGATC CGGCGCCGTT  
8351 TGATGGAGTT GGTCGGAGCA CGACGCGCAT GAATGAGGTC GTCTTGTCAC  
8401 GCGAAGAGCT GCGTCAATCT TGTCTCGACC TGCTTGAAAA ACGCGCTGTC  
8451 GAACACCCTG CGGGACACCA AGGCAAGCTC GCCGCCCCTG ATGTTGTGCA  
8501 CCGCGACGA

**FIGURE 2E**

8301  
8351  
8401  
8451  
8501

SEQ ID NO:3

1 TCGCGCGTTT CGGTGATGAC GGTGAAAACC TCTGACACAT GCAGCTCCCCG  
51 GAGACGGTCA CAGCTTGTCT GTAAGCGGAT GCCGGGAGCA GACAAGCCCCG  
101 TCAGGGCGCG TCAGCGGGTG TTGGCGGGTG TCGGGGCTGG CTTAACTATG  
151 CGGCATCAGA GCAGATTGTA CTGAGAGTGC ACCATATGCG GTGTGAAATA  
201 CCGCACAGAT GCGTAAGGAG AAAATACCGC ATCAGGCGCC ATTCGCCATT  
251 CAGGCTGCGC AACTGTTGGG AAGGGCGATC GGTGCGGGCC TCTTCGCTAT  
301 TACGCCAGCT GCGGAAAGGG GGATGTGCTG CAAGGCGATT AAGTTGGGTA  
351 ACGCCAGGGT TTTCCCAGTC ACGACGTTGT AAAACGACGG CCAGTGAATT  
401 CGGCAATGGG TCGAAATTCA TAGAATTTTG TGTGAGGTGC GTAGCGGCTC  
451 TGACAGGGGT GCTGCGCGGA GATCTCTGGT CTCAGGTAGG GCGACAATGG  
501 AGAGGTGTTA GTTGCCCCCT GTATCGCTCT CTGCGTGGCG CATTGGGTCA  
551 TCCTGCCCCG ACATATGATA TTCCGCTAGA GGATTACTGA TAGTTTCTGC  
601 CTGTGCGGGCT TGTCGGGCTT GTCGGGCTTG TCGGGCTTGT CGGGCCTGTC  
651 CCTCTTGTC CGCCTGTCCT CACTTTTTCA CAATCAAAAA ATGGGCGAAG  
701 CCCTTCTTGT TCTATAGTTC TTATAGTTCA TACGAAAATT ACACATAATT  
751 ATCAATAGCT TATTCGCTTA AAAGGGAGTA ATTGGGCCGC AAAAGGGAGT  
801 AATTGGGCCG CAAAAGGGAG TAATTGGGCC GCAAAGGGA GTAATTGGGC  
851 CGATATCGGT TGTTTACATG GGGAGGAATC CCCTTAATCA TTTCTCCCCA  
901 TGGGAAAGAC AACACAAGTG GCCGCAGACC GGGCCTTCGA CCAGACAAAA  
951 ACTGTGCTCC CTGCCGAGGT GGCGAGAGGG GTCTATATGC GCAATCCGCC  
1001 CCGCCTGCAG GCGCTCAAGC TCATGCATTT AATGATAGCC ACTGCGGGCG  
1051 GCCGCATGGC TGATGATGTG CGCCATGAAA TGCGGCTGGC CGACATTCGC  
1101 GCAATCGACG GCATGAAAAA CCATGACCGT GAGAGCCTGA CCCCCTGTT  
1151 CGAGGAGCTA GCCGCTGCGG GTTGACCCA TGATGACCCT GCAAAGATGA  
1201 TCGTGACAGT CGGCGGCTTG GTCGATGAGG CGCGAATAGA CTACCGCCAG  
1251 GAGGCAAGCG GCGAACTCCT AGTGACGTGG ACCTTCCGGA GTACATTCCG  
1301 TCGTATGGCG GCGGAGTCGA ACCACTGGGC CATTCTCGAC CGTCAAACGG  
1351 TATTCCATCT CGGTAGTAAG TATTCCGTGC TGCTGTTCCA GCACGTCTCT  
1401 AGTCTCGCCA ATCTTGATCG GATGAGCGCG AAAACCTTTA CGGTCCCCGA  
1451 GTTGCGGGCG CTCCTTGGAG TGCCCCGAGG AAAGATGGTT CGTTGGAACG  
1501 ACGTTAACAG ATTTGCTCTC AAACCTGCAC TGGATGAGAT CAACCATTTA  
1551 TCGCGTCTGA CATTGACGGC AAAGCCGACC AAGATTGGCC GTAGCGTGGC  
1601 AAGTGTGACT ATAGGCTGGG AAGTGAAAGA CGACCCAACC GTCGCCAGGC  
1651 GCGAGCTGGC GGGTTCCAAG GTCGGTCGAG ATGCTCGTCG CAGAGGGGCA  
1701 GCGGAAACGA TAGCCCCCTC CTTCCAGAA GCGGGCGGGA TCACCTACAG  
1751 TCCACGTTGG CTGGAGCTGA AACGCTCTGC TGGCAGCAAC AAGGACAACG  
1801 ATCTGATCGC CTCAGACTTC CGGCGTTTCT GTCGGGAGAG AGGCGTGCGT  
1851 CTGGACGCTG CAAACATCGA AAAACTGTTT TTAGATTTCT GCGCAAAGGT  
1901 AGGGAAGGTT TGAGTTTTGA GGTATTTTAC CGCAATAGTG TTAAATGACT  
1951 TTCGTGAAAC GATGTGCAAT ATAGCGGTAA GACTATGAAA TACACGGCTG

FIGURE 3A



2001 GACAGGCTGC AAAAGCAACG GGTGTGGCGA CCGCAACCAT CACTCGGGCG  
 2051 CTAAAAAGCG GTAAAAATTC CGGTAAAAAA GATGAATCTG GGGCATGGGT  
 2101 TATAGATCCT GCAGAATTGC ACAGAGTGTT TCCTCCCATT TCAAAGAAAT  
 2151 ACACCGAAAC ACCTAACACG CAAGTATATG GTAAGCGTGA TGAAACACAT  
 2201 GAAATGACCT CAGAAATCAG CGCATTAGAG CGTGAAGTTC GGACTTTACG  
 2251 CGATGCTTTA TCTGATGCCA GGGAGGATCG CGACAAATGG CGCGACATGG  
 2301 CCGAGCGTCT TTCAATTTCA TCACCGATGA GAGAGGAAGA CCGCCCCCTT  
 2351 CAAAAACAAA GATGGTGGAA GATATTCTGA TCCTGGGCTT CAGGAGCCTT  
 2401 GCCTTTACTG GCGGAAAAAC GCGATATTGA GGCACAGGCC CGCACTTTAG  
 2451 AGGCGGAAGC CTATAACGAG TACCAAAACA CTAGAAGCCA GATTGAGGAA  
 2501 AATAGGGAAC GTGGGATCCT CTAGAGTCGA CCTGCAGGCA TGCAAGCTTG  
 2551 GCGTAATCAT GGTCATAGCT GTTTCCTGTG TGAAATTGTT ATCCGCTCAC  
 2601 AATTCCACAC AACATACGAG CCGGAAGCAT AAAGTGTAAG GCCTGGGGTG  
 2651 CCTAATGAGT GAGCTAACTC ACATTAATTG CGTTGCGCTC ACTGCCCCGT  
 2701 TTCCAGTCGG GAAACCTGTC GTGCCAGCTG CATTAATGAA TCGGCCAACG  
 2751 CGCGGGGAGA GGCGGTTTGC GTATTGGGCG CTCTTCCGCG CTCGGTCTTG  
 2801 CCTTGCTCGT CGGTGATGTA CTTACCAGC TCCGCGAAGT CGCTCTTCTT  
 2851 GATGGAGCGC ATGGGGACGT GCTTGGCAAT CACGCGCACC CCCC GGCCGT  
 2901 TTTAGCGGCT AAAAAAGTCA TGGCTCTGCC CTCGGGCGGA CCACGCCCAT  
 2951 CATGACCTTG CCAAGCTCGT CCTGCTTCTC TTCGATCTTC GCCAGCAGGG  
 3001 CGAGGATCGT GGCATCACCG AACC GCGCCG TGCGCGGGTC GTCGGTGAGC  
 3051 CAGAGTTTCA GCAGGCCGCC CAGGCGGCC AGGTCGCCAT TGATGCGGGC  
 3101 CAGCTCGCGG ACGTGCTCAT AGTCCACGAC GCCCGTGATT TTGTAGCCCT  
 3151 GGCCGACGGC CAGCAGGTAG GCCGACAGGC TCATGCCGGC CGCCGCCGCC  
 3201 TTTTCTCTCA TCGCTCTTCG TTCGTCTGGA AGGCAGTACA CCTTGATAGG  
 3251 TGGGCTGCCC TTCCTGGTTG GCTTGGTTTC ATCAGCCATC CGCTTGCCCT  
 3301 CATCTGTTAC GCCGGCGGTA GCCGGCCAGC CTCGCAGAGC AGGATTCCCC  
 3351 TTGAGCACCG CCAGGTGCGA ATAAGGGACA GTGAAGAAGG AACACCCGCT  
 3401 CGCGGGTGGG CCTACTTCAC CTATCCTGCC CGGCTGACGC CGTTGGATAC  
 3451 ACCAAGGAAA GTCTACACGA ACCCTTTGGC AAAATCCTGT ATATCGTGCG  
 3501 AAAAAGGATG GATATACCGA AAAAATCGCT ATAATGACCC CGAAGCAGGG  
 3551 TTATGCAGCG GAAAAGCTTC CTCGCTCACT GACTCGCTGC GCTCGGTCTG  
 3601 TCGGCTGCGG CGAGCGGTAT CAGCTCACTC AAAGGCGGTA ATACGGTTAT  
 3651 CCACAGAATC AGGGGATAAC GCAGGAAAGA ACATGTGAGC AAAAGGCCAG  
 3701 CAAAAGGCCA GGAACCGTAA AAAGGCCGCG TTGCTGGCGT TTTTCCATAG  
 3751 GCTCCGCCCC CCTGACGAGC ATCACA AAAA TCGACGCTCA AGTCAGAGGT  
 3801 GGCGAAACCC GACAGGACTA TAAAGATACC AGGCGTTTCC CCCTGGAAGC  
 3851 TCCCTCGTGC GCTCTCCTGT TCCGACCCTG CCGCTTACCG GATACCTGTC  
 3901 CGCCTTTCTC CCTTCGGGAA GCGTGGCGCT TTCTCATAGC TCACGCTGTA  
 3951 GGTATCTCAG TTCGGTGTAG GTCGTTGCT CCAAGCTGGG CTGTGTGCAC  
 4001 GAACCCCCCG TTCAGCCCGA CCGCTGCGCC TTATCCGGTA ACTATCGTCT  
 4051 TGAGTCCAAC CCGGTAAGAC ACGACTTATC GCCACTGGCA GCAGCCACTG

FIGURE 3B

4101 GTAACAGGAT TAGCAGAGCG AGGTATGTAG GCGGTGCTAC AGAGTTCTTG  
 4151 AAGTGGTGGC CTAACCTACGG CTACACTAGA AGGACAGTAT TTGGTATCTG  
 4201 CGCTCTGCTG AAGCCAGTTA CCTTCGGAAA AAGAGTTGGT AGCTCTTGAT  
 4251 CCGGCAAAACA AACCACCGCT GGTAGCGGTG GTTTTTTTGT TTGCAAGCAG  
 4301 CAGATTACGC GCAGAAAAAA AGGATCTCAA GAAGATCCTT TGATCTTTTC  
 4351 TACGGGGTCT GACGCTCAGT GGAACGAAAA CTCACGTAA GGGATTTTGG  
 4401 TCATGAGATT ATCAAAAAGG ATCTTCACCT AGATCCTTTT GGGGGGGGGG  
 4451 GGCGCTGAGG TCTGCCTCGT GAAGAAGGTG TTGCTGACTC ATACCAGGCC  
 4501 TGAATCGCCC CATCATCCAG CCAGAAAGTG AGGGAGCCAC GGTTGATGAG  
 4551 AGCTTTGTTG TAGGTGGACC AGTTGGTGAT TTTGAACTTT TGCTTTGCCA  
 4601 CGGAACGGTC TCGGTTGTCT GGAAGATGCG TGATCTGATC CTTCAACTCA  
 4651 GCAAAAGTTC GATTTATTCA ACAAAGCCGC CGTCCCGTCA AGTCAGCGTA  
 4701 ATGCTCTGCC AGTGTTACAA CCAATTAACC AATTCTGATT AGAAAACTC  
 4751 ATCGAGCATC AAATGAACT GCAATTTATT CATATCAGGA TTATCAATAC  
 4801 CATATTTTGT AAAAAGCCGT TTCTGTAATG AAGGAGAAAA CTCACCGAGG  
 4851 CAGTTCCATA GGATGGCAAG ATCCTGGTAT CGGTCTGCGA TTCCGACTCG  
 4901 TCCAACATCA ATACAACCTA TTAATTTCCC CTCGTCAAAA ATAAGTTAT  
 4951 CAAGTGAGAA ATCACCATGA GTGACGACTG AATCCGGTGA GAATGGCAAA  
 5001 AGCTTATGCA TTTCTTTCCA GACTTGTTCA ACAGGCCAGC CATTACGCTC  
 5051 GTCATCAAAA TCACTCGCAT CAACCAAACC GTTATTCATT CGTGATTGCG  
 5101 CCTGAGCGAG ACGAAATACG CGATCGCTGT TAAAAGGACA ATTACAAACA  
 5151 GGAATCGAAT GCAACCGGCG CAGGAACACT GCCAGCGCAT CAACAATATT  
 5201 TTCACCTGAA TCAGGATATT CTTCTAATAC CTGGAATGCT GTTTTCCCGG  
 5251 GGATCGCAGT GGTGAGTAAC CATGCATCAT CAGGAGTACG GATAAAATGC  
 5301 TTGATGGTCG GAAGAGGCAT AAATTCCGTC AGCCAGTTTA GTCTGACCAT  
 5351 CTCATCTGTA ACATCATTTG CAACGCTACC TTTGCCATGT TTCAGAAACA  
 5401 ACTCTGGCGC ATCGGGCTTC CCATACAATC GATAGATTGT CGCACCTGAT  
 5451 TGCCCGACAT TATCGCGAGC CCATTTATAC CCATATAAAT CAGCATCCAT  
 5501 GTTGGAATTT AATCGCGGCC TCGAGCAAGA CGTTTCCCGT TGAATATGGC  
 5551 TCATAACACC CCTTGTATTA CTGTTTATGT AAGCAGACAG TTTTATTGTT  
 5601 CATGATGATA TATTTTTATC TTGTGCAATG TAACATCAGA GATTTTGAGA  
 5651 CACAACGTGG CTTTCCCCC CCCCCATTA TTGAAGCATT TATCAGGGTT  
 5701 ATTGTCTCAT GAGCGGATAC ATATTTGAAT GTATTTAGAA AAATAAACAA  
 5751 ATAGGGGTTC CGCGCACATT TCCCCGAAAA GTGCCACCTG ACGTCTAAGA  
 5801 AACCATTATT ATCATGACAT TAACCTATAA AAATAGGCGT ATCACGAGGC  
 5851 CCTTTCGTC

**FIGURE 3C**

SEQ ID NO:4

1 GGCAATGGGT CGAAATTCAT AGAATTTTGT GTGAGGTGCG TAGCGGCTCT  
51 GACAGGGGTG CTGCGCGGAG ATCTCTGGTC TCAGGTAGGG CGACAATGGA  
101 GAGGTGTTAG TTGCCCCCTG TATCGCTCTC TCGGTGGCGC ATTGGGTCAT  
151 CCTGCCCCGA CATATGATAT TCCGCTAGAG GATTACTGAT AGTTTCTGCC  
201 TGTCGGGCTT GTCGGGCTTG TCGGGCTTGT CGGGCTTGTC GGGCCTGTCC  
251 CTCTTGTCCT GCCTGTCTCT ACTTTTTCAC AATCAAAAAA TGGGCGAAGC  
301 CCTTCTTGTT CTATAGTTCT TATAGTTCAT ACGAAAATTA CACATAATTA  
351 TCAATAGCTT ATTCGCTTAA AAGGGAGTAA TTGGGCCGCA AAAGGGAGTA  
401 ATTGGGCCGC AAAAGGGAGT AATTGGGCCG CAAAAGGGAG TAATTGGGCC  
451 GATATCGGTT GTTTACATGG GGAGGAATCC CCTTAATCAT TTCTCCCCAT  
501 GGGAAAGACA ACACAAGTGG CCGCAGACCG GGCCTTCGAC CAGACAAAAA  
551 CTGTGCTCCC TGCCGAGGTG GCGAGAGGGG TCTATATGCG CAATCCGCCC  
601 CGCCTGCAGG CGCTCAAGCT CATGCATTTA ATGATAGCCA CTGCGGGCGG  
651 CCGCATGGCT GATGATGTGC GCCATGAAAT GCGGCTGGCC GACATTCGCG  
701 CAATCGACGG CATGAAAAAC CATGACCGTG AGAGCCTGAC CCCGCTGTTC  
751 GAGGAGCTAG CCGCTGCGGT GTTGACCCAT GATGACCCTG CAAAGATGAT  
801 CGTGACAGTC GCGGGCTTGG TCGATGAGGC GCGAATAGAC TACCGCCAGG  
851 AGGCAAGCGG CGAACTCCTA GTGACGTGGA CCTTCCGGAG TACATTCCGT  
901 CGTATGGCGG CGGAGTCGAA CCACTGGGCC ATTCTCGACC GTCAAACGGT  
951 ATTCCATCTC GGTAGTAAGT ATTCCGTGCT GCTGTTCCAG CACGTCTCTA  
1001 GTCTCGCCAA TCTTGATCGG ATGAGCGCGA AAACCTTTAC GGTCCCCGAG  
1051 TTGCGGGCGC TCCTTGAGT GCCCGAGGGA AAGATGGTTC GTTGGAACGA  
1101 CGTTAACAGA TTTGCTCTCA AACCTGCACT GGATGAGATC AACCATTTAT  
1151 CGCGTCTGAC ATTGACGGCA AAGCCGACCA AGATTGGCCG TAGCGTGGCA  
1201 AGTGTGACTA TAGGCTGGGA AGTGAAAGAC GACCCAACCG TCGCCAGGCG  
1251 CGAGCTGGCG GGTTCGAAG TCGGTGCGA TGCTCGTCGC AGAGGGGCAG  
1301 CGGAAACGAT AGCCCCCTCC TTCCCAGAAG CGGGCGGGAT CACCTACAGT  
1351 CCACGTTGGC TGGAGCTGAA ACGCTCTGCT GGCAGCAACA AGGACAACGA  
1401 TCTGATCGCC TCAGACTTCC GCGGTTTCTG TCGGGAGAGA GCGTGCGTC  
1451 TGGACGCTGC AAACATCGAA AACTGTTTT TAGATTTCTG CGCAAAGGTA  
1501 GGGAAGGTTT GAGTTTTGAG GTATTTTACC GCAATAGTGT TAAATGACTT  
1551 TCGTGAAACG ATGTGCAATA TAGCGGTAAG ACTATGAAAT ACACGGCTGG  
1601 ACAGGCTGCA AAAGCAACGG GTGTGGCGAC CGCAACCATC ACTCGGGCGC  
1651 TAAAAAGCGG TAAATTTTCC GGTAAAAAAG ATGAATCTGG GGCATGGGTT  
1701 ATAGATCCTG CAGAATTGCA CAGAGTGTTT CCTCCCATT TCAAAGAAATA  
1751 CACCGAAACA CCTAACACGC AAGTATATGG TAAGCGTGAT GAAACACATG  
1801 AAATGACCTC AGAAATCAGC GCATTAGAGC GTGAAGTTCG GACTTTACGC  
1851 GATGCTTTAT CTGATGCCAG GGAGGATCGC GACAAATGGC GCGACATGGC  
1901 CGAGCGTCTT TCAATTTTCAT CACCGATGAG AGAGGAAGAC CGCCCCCTC  
1951 AAAACAAAG ATGGTGGAAG ATATTCTGAT CCTGGGCTTC AGGAGCCTTG

FIGURE 4A

2001	CCTTTAAAC	CTGAATCAGC	ATTCTAGCGA	TGCTGATAAG	AAGTAAATAT
2051	AGCCACAATA	GAGCGGCCAT	TTTCCATTCA	CATACAGCTC	ATCATGTGAT
2101	CAATATCAAG	TATTGATATT	CATCAATGGA	GAAGAATTTA	CATGTATCAC
2151	AGGATCATCA	CAGCATTTGT	TTTTGTATTT	CTAAGTGCTA	ACATAACTAT
2201	CGCTGGCCCT	AAAGAAGATT	GTACTATTGC	AGTATCTCAC	CTTGGGTTTC
2251	AGACCGATAA	TTACAGCTTT	GTCGAAGCCG	GTTTTTTTTGC	CAGAGAGAGA
2301	CACGTTTTTG	ATGGTGTAAT	AAACTGCTAC	GTATCTCATG	ATGGTAACAT
2351	ACACAGCATC	ATCCGGGGCA	ACACACCTCT	TATGGAAGAT	GGATATTATG
2401	GCCCAGAAGT	ACTGGCGGAA	AAACGCGATA	TTGAGGCACA	GGCCCCGCACT
2451	TTAGAGGCGG	AAGCCTATAA	CGAGTACCAA	AACACTAGAA	GCCAGATTGA
2501	GGAAAATAGG	GAACGTG			

**FIGURE 4B**